## DELIBERATE SEMICONDUCTOR FILM VARIATION TO COMPENSATE FOR RA-DIAL PROCESSING DIFFERENCES, DETER-MINE OPTIMAL DEVICE CHARACTERIS-TICS, OR PRODUCE SMALL PRODUCTIONS

## **Abstract**

Methods and apparatuses are disclosed that can introduce deliberate semiconductor film variation during semiconductor manufacturing to compensate for radial processing differences, to determine optimal device characteristics, or produce small production runs. The present invention radially varies the thickness and/or composition of a semiconductor film to compensate for a known radial variation in the semiconductor film that is caused by performing a subsequent semiconductor processing step on the semiconductor film.